AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of implementing ~~an~~ a connection admission control (CAC) algorithm in a telecommunications system, the method comprising:

dynamically adapting at least one parameter of said CAC algorithm as a function of a traffic model representative of traffic present,

wherein said traffic model includes one or more parameters representative of at least one type of traffic present.

2. (cancelled)

3. (previously presented) The method according to claim 1, wherein the parameters representative of the at least one type of traffic include parameters representative of quality of service (QoS) requirements for the at least one type of traffic.

4. (currently amended): A method of implementing ~~an~~ a connection admission control (CAC) algorithm in a telecommunications system, the method comprising:

dynamically adapting at least one parameter of said CAC algorithm as a function of a traffic model representative of ~~the~~ traffic present,

wherein parameters representative of a type of traffic include parameters representative of quality of service (QoS) requirements for the type of traffic, and

wherein parameters representative of quality of service requirements include a maximum transmission time-delay and a probability that the transmission time-delay will be greater than that maximum transmission time-delay.

5. (previously presented) The method according to claim 1, wherein parameters representative of the type of traffic include parameters representative of transmission resource requirements for said type of traffic and for a given quality of service (QoS).

6. (previously presented) The method according to claim 5, wherein parameters representative of transmission resource requirements for a given quality of service (QoS) include a connection activity factor.

7. (previously presented) The method according to claim 1, wherein, if different traffic types are present, said traffic model includes relative proportions for said different traffic types.

8. (previously presented) The method according to claim 1, wherein said at least one parameter corresponds to a margin corresponding to a maximum acceptable load.

9. (previously presented) The method according to claim 1, wherein said at least one parameter corresponds to an equivalent bandwidth.

10. (previously presented) The method according to claim 1, wherein the value of said at least one parameter is chosen from different reference values optimized for different reference traffic models.

11. (previously presented) The method according to claim 10, wherein, for a traffic model that does not correspond to a reference traffic model, a reference traffic model is determined that constitutes the best approximation thereof.

12. (previously presented) The method according to claim 10, wherein, for a traffic model that does not correspond to a reference traffic model, a reference traffic model is determined that constitutes the best approximation thereof and has the severest constraints.

13. (previously presented) The method according to claim 1 further comprising determining reference traffic models and determining corresponding reference values for said at least one parameter.

14. (previously presented) The method according to claim 13, wherein said reference values are determined by simulation or measurement.

15. (previously presented) The method according to claim 13, wherein said reference values are determined by calculation.

16. (previously presented) The method according to claim 13, including a second step during which reference traffic models and corresponding reference values are stored in a memory.

17. (previously presented) The method according to claim 16, further comprising estimating a traffic model representative of the traffic present.

18. (previously presented) The method according to claim 17, wherein said estimation includes an estimation of the traffic types present and, if different traffic types are present, relative proportions for said different traffic types.

19. (previously presented) The method according to claim 18, wherein said estimation includes estimating the traffic types present based on traffic information contained in signaling messages received by a network element from at least one other network element.

20. (previously presented) The method according to claim 18, wherein said estimation includes estimating relative proportions for different traffic types obtained by measuring or counting traffic.

21. (previously presented) The method according to claim 17, wherein a traffic model representative of the traffic present is re-estimated each time a new connection is set-up and each time a connection is cleared down.

22. (previously presented) The method according to claim 17, wherein a traffic model representative of the traffic present is re-estimated at the end of a pre-determined time period.

23. (previously presented) The method according to claim 17, further comprising choosing a reference traffic model from the determined reference traffic models that best approximates the estimated traffic model.

24. (previously presented) The method according to claim 23, wherein during choosing the reference traffic model, the reference traffic model is chosen that best approximates the traffic model based on the severest constraints.

25. (currently amended): The method according to claim 23, further comprising dynamically modifying said at least one parameter of said CAC algorithm is-a function of parameters corresponding to the chosen reference traffic model.

26. (previously presented) The method according to claim 25, wherein a modification is effected only in the event of a significant change in said at least one parameter.

27. (currently amended): The method according to claim 25, further comprising executing said CAC algorithm with said modified at least one parameter.

28. (previously presented) The method according to claim 1, used for AAL2 connection admission control on an ATM virtual circuit.

29. (previously presented) The method according to claim 28, used for AAL2 connection admission control on an ATM virtual circuit at a Iub interface in a UTRAN.

30. (previously presented) The method according to claim 28, used for AAL2 connection admission control on an ATM virtual circuit at a Iu-CS interface in a UTRAN.

31. (previously presented) The method according to claim 28, used for AAL2 connection admission control on an ATM virtual circuit at a Iur interface in a UTRAN.

32. (previously presented) The method according to claim 1, used for admission control in a packet-switched mode network.

33. (previously presented) The method according to claim 1, used for admission control at the radio interface of a CDMA system.

34. (previously presented) The radio access network element for use in a mobile radio system and including means for implementing a method according to claim 1.

35. (previously presented) The base station controller (RNC) for use in a mobile radio system and including means for implementing a method according to claim 1.

36. (previously presented) The base station (Node B) for use in a mobile radio system and including means for implementing a method according to claim 1.

37. (previously presented) The core network element for use in a mobile radio system and including means for implementing a method according to claim 1.

38. (currently amended): The method ~~of implementing an admission control algorithm in a telecommunications system~~ according to claim 1, further comprising adapting the at least one parameter of said algorithm as a function of a plurality of traffic model representative of the traffic present, wherein each of the traffic models of the plurality of traffic models is based on different traffic behavior.

39. (new): The method according to claim 1, wherein the CAC algorithm comprises verifying if a sum of equivalent bandwidths of an ATM adaptation layer (AAL2) connections set up on an ATM virtual circuit satisfies the following condition:

$$\sum EB(i) \leq K_{VC} \times EB_{VC}$$

in which:

- EB(i) is an equivalent bandwidth required for an AAL2 connection set up on the ATM virtual circuit for a service "i" and for a given target QoS, represented in particular by given maximum transmission time-delay and a given probability that the transmission time-delay will be greater than the maximum transmission time-delay,

- K_{VC} is a margin corresponding to a maximum acceptable load for the ATM virtual circuit, and

- EB_{VC} is an equivalent bandwidth of the ATM virtual circuit onto which the AAL2 connections are multiplexed,

wherein value of K_{VC} is dynamically selected according to the traffic model.